

LIST OF *HETEROCEROUS LEPIDOPTERA* RECENTLY COLLECTED
BY THE REV. T. BLACKBURN IN THE HAWAIIAN ISLANDS.

BY ARTHUR G. BUTLER, F.L.S.

The seventeen species enumerated below, as might be expected, have an intermediate character between the *Lepidoptera* of Australia and North America; most, if not all, of them were probably collected at Honolulu, where Mr. Blackburn is at present; they were forwarded by him to Mr. N. C. Tuely, who has kindly presented them to the National Collection.

Family SPHINGIDÆ.

Sub-family CHÆROCAMPINÆ.

DEILEPHILA LIVORNICA, Esper (No. 13).*

Five examples of this widely-distributed species, differing in no respect from the typical form.

Sub-family SPHINGINÆ.

PROTOPARCE CINGULATA, Fabricius (No. 2).

One fine example of this American species.

Family LEUCANIIDÆ.

LEUCANIA DISLOCATA, Walker (No. 6).

One specimen rather darker than the type. This species is probably endemic; it was described from the same group of Islands.

Family XYLOPHASIIDÆ.

PRODENIA INGLORIA, Walker (No. 9).

Evidently common and somewhat variable (of the five examples collected, no two are quite alike, whilst one example is not at all unlike *P. bipars* of Walker); the type was described from Moreton Bay, and the species probably occurs in other parts of Australia.

Family PLUSIIDÆ.

PLUSIA VERTICILLATA? Guénée (No. 3).

One specimen. It closely approaches *P. precatonis*, from N. America, and *P. eriosoma*, from New Zealand. I do not feel certain of Walker's identification of Guénée's species.

Family HYPENIDÆ.

HYPENA OBSOLETA, *n. sp.* (No. 14).

Primaries above reddish-brown, mottled with black, faintly shot with lilac,

*The numbers are retained for the benefit of the Collector.

becoming bronzy towards the outer margin; a broad paler band crossing the basal half of the wing from the costal vein to the inner margin; this band is excavated on both sides (or gradually constricted) upon the interno-median area, it is followed by a broad ill-defined externally dentated dark brown belt, most clearly defined towards the inner margin; an irregular discal series of black spots from the costa to the second median branch, white-speckled towards the costa; fringe pale reddish-brown, intersected internally by two almost confluent dark grey parallel lines; secondaries smoky-brown with a faint lilacine shot; fringe whity-brown, with two internal lines as in the primaries, the outer line double the width of the inner: palpi pale reddish-brown; head whity-brown; collar and thorax pale reddish-brown; abdomen smoky-brown; primaries below pale grey, shot with opaline; the discoidal cell brownish; costal border sandy-yellowish, mottled with black; secondaries sordid whitish with a lilacine gloss, densely mottled with grey; fringes of all the wings whitish, spotted with grey at the termination of the veins, and with traces of the double lines of the upper surface; body below whity-brown: expanse of wings, 1 inch 1 line.

Two examples.

HYPENA INSIGNIS, *n. sp.* (No. 14).

Wings above pale grey, with a feeble lilacine gloss; primaries with a spot at the end of the cell, a broad sub-quadrate slightly-constricted belt from the external half of the median vein to the inner margin, and a series of discal spots, black-brown: body pale brown: wings below whitish with feeble grey mottlings; body below whitish, legs pale testaceous: expanse of wings, 1 inch.

One example.

Mr. Blackburn seems to have regarded this as a variety of the preceding, but it is so extremely different in coloration and even in the position of the markings, that I cannot believe them to be the same.

Family HERMINIDÆ.

HERMINIA CENEUSALIS, Walker (No. 53).

This species was originally described, from an example taken at Moreton Bay, as a *Sophronia*?; it is allied to *H. nemoralis*: two specimens were sent home.

Family BOTIDIDÆ.

BOTYS BLACKBURNI, *n. sp.* (No. 32).

Primaries testaceous, crossed in the middle by two widely-separated strongly-angulated greyish-brown lines which diverge towards the costa, the angle of the inner one upon the median vein, that of the outer one on the first median interspace, the band enclosed by these two lines margined on each side by a diffused sandy-whitish line; outer margin dotted with black; secondaries pale greyish-brown; discocellulars dusky; a dusky angulated line beyond the middle, nearly straight from the first sub-costal branch to the second median, then abruptly inarched and running to near the extremity of the sub-median vein; disc whitish, slightly tinted with reddish

externally, with a central sub-marginal broad greyish nebulous belt; a marginal series of blackish spots: thorax testaceous, abdomen whitish: under-surface uniformly creamy-whitish: expanse of wings, 1 inch, 5 lines.

There is one example of this species; it and the following will form a peculiar group in the genus: *B. Blackburni* has the aspect of *Cledeobia* and *B. accepta* of *Pionia*, but in structure they altogether agree with *Botys*.

BOTYS ACCEPTA, n. sp. (Nos. 17 & 18).

Wings above grey. Primaries with a black dot in the cell; a zigzag oblique line across the centre of the wing, its upper portion crossing the discocellulars (and traversed by two black dots), the longitudinal portion on the median vein, whence it turns off abruptly at the origin of the first median branch, the upper part blackish, the lower part black; a second undulated line, angulated at the second median branch, sordid white, margined within by a black line, and externally by a diffused blackish belt; a white sub-marginal line, bounded internally by a series of elongated black spots, and externally by a black line; fringe white; veins, and a transverse line bounding the inner transverse line, white; secondaries with the discocellular, a post-median straight line (bordered externally with sordid white), a diffused discal belt and the sub-marginal spots and marginal line as in primaries, black; veins, sub-marginal line, and fringe sordid white; body grey, abdomen banded with sordid white; under surface grey; palpi, legs, and margins of wings sordid white; a sub-marginal series of black dots. Secondaries with a black dot on the discocellulars; a dusky diffused belt across the disc. Expanse of wings, 11 lines.

Three examples.

Family PYRALIDÆ.

PYRALIS ACHATINA, n. sp. (No. 26).

Basal third brown, bounded externally by a white and a dusky zigzag line; central area sordid whitish, irrorated with grey, and bounded externally by a dusky and white irregular transverse line; discal or external area sordid whitish, irrorated with grey, especially on the primaries; a marginal series of whitish spots, bounded on each side by black dots; fringe greyish; primaries with the costa black spotted; a black spot at the end of the cell; body whity-brown; under surface whitish, primaries with the basal two-thirds grey, immediately followed by an arched discal grey line, which also occurs on the secondaries; a black spot at the end of the cell; all the wings with sub-marginal and marginal series of grey spots, the inner series partly confluent: expanse of wings, 7—10 lines.

Two examples.

This species has the general coloration of *Ephestia*, but agrees in structure with *Pyralis*; its nearest ally seems to be *P. farinalis*.

Family ENNYCHIDÆ.

RHODARIA DESPECTA, n. sp. (No. 27).

Primaries testaceous, shot with lilacine; the costa clay-coloured, spotted with

grey towards apex ; a slightly angulated transverse grey line near the base ; the two ordinary grey spots in the cell indicated by grey outlines, the reniform rather large ; an irregularly dentated transverse line from the costa to the second median branch, along which it runs to near its origin, and thence in a somewhat sinuous line to inner margin ; a nearly marginal series of black dots ; fringe silver-grey ; secondaries pale shining brown ; head and palpi ferruginous, remainder of body above brown, below white with lateral series of black dots on the venter ; wings below whitish ; a series of marginal black dots ; primaries with costa ochraceous, with four black dots towards the apex ; discoidal cell, and the area below and beyond it, dusky ; a blackish spot closing the cell, and a curved discal series of dark grey spots ; secondaries with two black dots at the end of the cell ; a discal series of pale grey spots. Expanse of wings, 9 lines.

One example.

This species somewhat resembles some of the smaller species of *Botys*, particularly in the marking of the primaries.

Family ASOPIDÆ.

HYMENIA RECURVALIS, Fabricius (No. 25).

Two specimens of this almost cosmopolitan insect.

Family PHYCIDÆ.

EPHESTIA ELUTELLA, Hübner (No. 24).

One specimen of this widely distributed insect.

Family GELECHIIDÆ.

DEPRESSARIA CONVICTELLA, Walker (No. 39).

Two examples of this little Australian species. It seems allied to *D. capreolella*.

Mr. McLachlan kindly assisted me in determining the genera of the two following species ; but, as they may possibly exist in North America, I prefer to avoid the chance of adding to the synonymy by giving them distinctive names.

Family ARGYRESTHIIDÆ.

ARGYRESTHIA *sp.* (No. 42).

Two examples.

Family ELACHISTIDÆ.

LAVERNA *sp.* (No. 48).

One example.

Nearest to *L. conturbatella*, but darker, rather different in pattern, and with the palpi rather longer.

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